A New Species of Primovula from the Philippines

(Mollusca: Gastropoda)

BY

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(Plate 19)

CARIGARA BAY, SAMAR ISLAND in the Philippines is an area exceptionally rich in molluscan species of all kinds; notable among the less common Cypraea from this bay are Cypraea pulchella Swainson, 1823, C. saulae Gaskoin, 1843, and C. pyriformis Gray, 1824, to mention only a few. During April 1962, commercial prawn and fish trawlers were working the ocean bottom in Carigara Bay in from 20 to 30 fathoms on a muddy substrate. Among the many hauls made on that particular trip, the fishermen brought up the above-mentioned cypraeid species and an unfamiliar example of the Ovulidae, which was sent to me for identification by Mr. Donald Dan of Manila.

After a thorough review of the material and monographs available to me (Kiener, 1843; Sowerby, 1848; Reeve, 1865; Weinkauff, 1881; Schilder, 1932; Allan, 1956), and miscellaneous papers dealing with this group, I concluded that this species might be new to science. In order not to overlook any new species that might have been published subsequent to those works I had reviewed, I sent photographs of the new form to Dr. F. A. Schilder, who courteously compared them with specimens in his collection, ultimately verifying my suggestion that the shell in question was heretofore unknown. I wish to express here my appreciation for his kind consideration of the problem.

Primovula (Diminovula) dondani C. N. CATE, spec. nov.

Shell medium-sized, elongately ovate; aperture curving, narrow adapically, broadening but abruptly constricted in front; terminal ridge a continuation of the inflated base, straight, sharp, converging with inner fossular ridge; both front and rear terminals produced, adapically more so and narrower; first funiculum prominent, V-shaped, superimposed on base at abaxial margin of posterior columella; first posterior outlet separates the smaller second funiculum; terminal canals narrow, semi-enclosed; central transverse dorsal surface somewhat flattened, bordered on either side by a vague angular line; irregularly curved margin strongly developed, tubular, crossed by

unevenly spaced, variously lengthened serrated teeth the entire length; terminal ridge straight, sharply ridged by eight weak serrated teeth; entire shell surface finely ridged with numerous transverse lines, crisscrossed laterally front to back with equally numerous very fine growth ridges; the body whorl is grey-white, darker on the base; the margins, teeth, terminals, terminal ridge, fossular ridge, and funiculum are white; interior of terminal canals very pale pink.

Primovula dondani is morphologically distinct from other known forms of Ovulidae; however, in several ways it seems related to shells of the subgenus Prosimnia SCHILDER, 1927. The ribs crossing the outer lip forming serrations are reminiscent of Prosimnia coarctata (Adams & Reeve, 1848), and of Primovula mariae Schilder, 1941, but the lack of a transverse carina on the dorsum precludes its possible affinity with either of these species. It should be further pointed out that there is some similarity to P. mariae because of the denticles on the front terminal ridge. Since the first funiculum exhibits no dental ribbing, morphological evidence seems to ally this new species with Primovula rhodia (A. Adams, 1854). Another comparable species appears to be Primovula bullata (Adams & Reeve, 1848). Comparing further, one can see reflected structural exaggerations of both subgenera Prosimnia and Primovula.

The measurements of the holotype, a unique specimen, are as follows: length, 23.0 mm, width, 11.6 mm, height, 10.0 mm.

The type locality is Carigara Bay, Samar, Philippines (11°20′ N. Lat., 124°40′ E. Long.). The holotype will be deposited in the Philippine National Museum and will bear the catalog number N. M. CO. 07287.

I have named this shell in honor of Donald Dan of Manila, who was the first to point out that this form might be new.

LITERATURE CITED

ALLAN, JOYCE

1956. Cowry shells of world seas. Georgian House, Melbourne. i-x; pp. 1-170; plts. 1-15



Figure 1

Figure 2

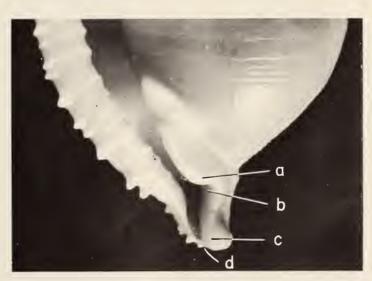


Figure 3

Figures 1 and 2: Dorsal and Ventral Aspects of *Primovula (Diminovula) dondani* C. N. Cate, spec. nov. (x 2\frac{1}{4})

Figure 3: Enlarged View Showing Detail of Posterior End of Shell (x 7)

a: first funiculum d: second posterior outlet b: first posterior outlet c: second funiculum